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Macrofungal diversity of Ilgaz Mountain National Park and its environs (Turkey)

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Abstract — The current research is based on macrofungi collected from Ilgaz Mountain National Park and its environs between 2004 and 2008. As a result of field and laboratory studies, 220 taxa belonging to 59 families were identified. Nineteen taxa belong to *Ascomycota* and 201 to *Basidiomycota*. Three — *Bisporella subpallida*, *Tricholoma bufonium, Leucogyrophana pseudomollusca* — represent new records for Turkish mycobiota. The complete list is available on: http://www.mycotaxon.com/resources/weblists.html.

Key words — biodiversity, mushrooms, taxonomy

Introduction

Ilgaz Mountain National Park is located in a transitional zone between Central Anatolia and the North-West Black Sea region within the boundaries of Çankırı and Kastamonu provinces of Turkey. The national park, which covers 1089 hectares and is situated in the A4 grid (see Davis 1965), has a great importance in terms of its flora, wildlife, geographical location, and natural landscape (Kuter 2008). Among the 109 bryophyte and 630 higher plant taxa identified within national park boundaries, 64 taxa are only indigenous to Ilgaz Mountain (Abay & Çetin, 2003) (Fig. 1).

The region is typical of mountain ranges within the prepontic zone of northwest Anatolia. Most of the area is covered with conifer forests, although angiosperm forests also exist at lower elevations. Fir (*Abies nordmanniana* subsp. *bornmuelleriana* (Mattf.) Coode & Cullen) is the dominant species, sometimes forming mixed stands with beech (*Fagus orientalis* Lipsky), Scots pine (*Pinus*

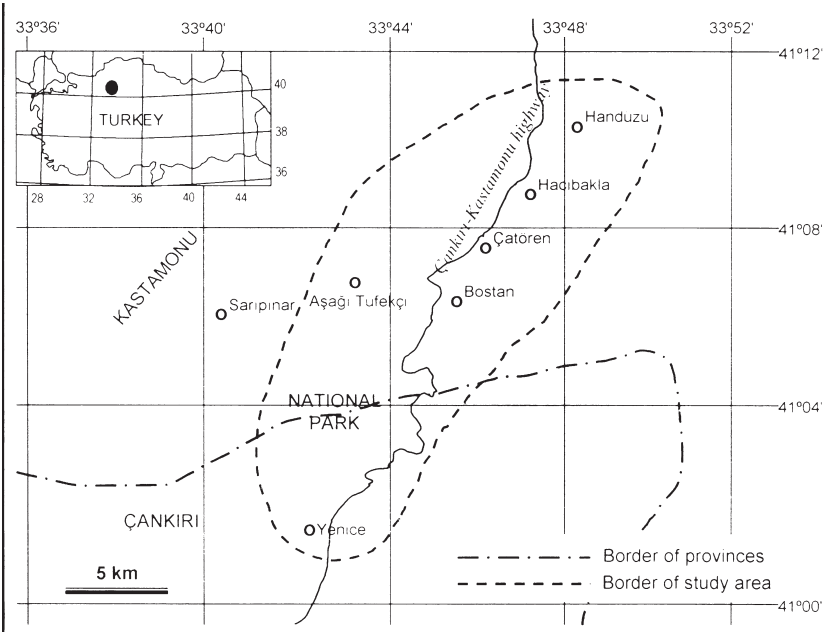

Figure 1. Ilgaz Mountain National Park (Turkey).
Macrofungi collecting area

sylvestris L.), and oak (*Quercus petraea* (Matt.) Liebl.). Black pine (*Pinus nigra* J.F. Arnold) and Scots pine are widespread in the western regions of the study area. The southern mountain slopes are influenced by a Mediterranean climate with semi-arid and very cold weather regimes while the northern slopes are under the influence of an oceanic climate (Akman et al. 1983).

Many studies have been conducted on macromycota of Turkey, some of which are still in progress. Sesli & Denchev (2010) cite 1929 macromycete taxa occurring in Turkey based on published research, and Işıloğlu et al. (2010) and Uzun et al. (2010) have contributed additional data. There has not, however, yet been any detailed mycological research devoted to Ilgaz Mountain National Park and its environs.

Materials and methods

The macrofungi samples of this study were collected from 26 localities in Ilgaz Mountain National Park and its environs between 2004 and 2008. Relevant morphological and ecological characters were recorded for the fungi, which were photographed in their natural habitats. In the herbarium, the fungi were further examined and microscopic characters were measured in Melzer's

reagent, 5% KOH, H_2O, and H_2SO_4. References consulted for identification purposes are provided in the complete annotated species list. All specimens are deposited at the herbarium of Ankara University (ANK).

Results

As a result of the present study, 220 taxa were identified and named according to the taxonomic conventions of Cannon & Kirk (2007), Kirk et al. (2008), and Index fungorum (www.speciesfungorum.org: accessed 1 January 2010). Taxa are presented in alphabetical order and are listed together with notes on habitat, geographical position, locality, collection date, and accession numbers (A: Akata).

The checklist contains 220 taxa belonging to 124 genera and 59 families. The taxa represent 19 *Ascomycota* (5 *Helotiales,* 10 *Pezizales,* 4 *Xylariales*) and 201 *Basidiomycota* (119 *Agaricales,* 5 *Auriculariales,* 13 *Boletales,* 4 *Cantharellales,* 3 *Dacrymycetales,* 2 *Geastrales,* 1 *Gloeophyllales,* 3 *Gomphales,* 3 *Hymenochaetales,* 2 *Phallales,* 21 *Polyporales,* 21 *Russulales,* 3 *Thelephorales* and 1 *Tremellales*). Three taxa are new records for Turkey: *Bisporella subpallida* (Rehm) Dennis 1978, *Tricholoma bufonium* (Pers.) Gillet 1874, and *Leucogyrophana pseudomollusca* (Parmasto) Parmasto 1967.

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